

~~CLAIMS~~

- sub B7
1. A sprayable hotmelt adhesive with a viscosity of 500 to 4,000 mPas at 150°C, characterized by the following composition:
- 5 A) 30 to 70% by weight of at least one poly- $\alpha$ -olefin or poly- $\alpha$ -olefin mixture with a softening point (ring-and-ball method) of 70 to 130°C and a melt viscosity at 190°C of 1,000 to 20,000 mPas,
- B) 5 to 30% by weight of at least one oil,
- C) 20 to 60% by weight of at least one hydrocarbon resin with a softening
- 10 range of 70 to 140°C and
- D) optionally additives.
2. A hotmelt adhesive as claimed in claim 1, characterized by a viscosity of 700 to 1,900 mPas at 150°C, as measured in accordance with
- 15 ASTM D 3236-88.
3. A hotmelt adhesive as claimed in claim 1, characterized in that the poly- $\alpha$ -olefin or the poly- $\alpha$ -olefin mixture is substantially amorphous and the poly- $\alpha$ -olefin has the following monomer composition:
- 3 to 75% by weight of an  $\alpha$ -olefin containing 4 to 10 carbon atoms,
- 20 - 25 to 95% by weight of propene and
- 0 to 20% by weight of ethene.
4. A hotmelt adhesive as claimed in claim 1, characterized in that the poly- $\alpha$ -olefin or the poly- $\alpha$ -olefin mixture has a melt viscosity at 190°C of 2,000 to 15,000 mPas.
- 25 5. A hotmelt adhesive as claimed in claim 1, characterized in that the poly- $\alpha$ -olefin has a density of  $<0.90 \text{ g/cm}^3$ , a needle penetration of 8 to 4.0 mm, a molecular weight as determined by gel permeation chromatography of at most 100,000 (weight average) or at least 4,000 (number average), the difference between the weight average and the number average
- 30 molecular weight being no more than six times the number average.

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6. A hotmelt adhesive as claimed in claim 1, characterized in that the poly- $\alpha$ -olefin mixture contains at least one poly- $\alpha$ -olefin with a melt viscosity of 40,000 to 60,000 and at least one poly- $\alpha$ -olefin with a melt viscosity of 3,000 to 10,000 Pas at 190°C.
- 5 7. A hotmelt adhesive as claimed in claim 1, characterized in that the paraffinic oil is a medicinal white oil.
8. A hotmelt adhesive as claimed in claim 1, characterized in that the hydrocarbon resin is a hydrocarbon resin containing 5 to 9 carbon atoms.
9. A hotmelt adhesive as claimed in claim 1, characterized in that the additive is at least one substance of the following group: heat and light stabilizer, optical brightener, antistatic agent, lubricant and antiblocking agent, nucleating agent, dye, pigment or flame retardant.
- 10 10. A hotmelt adhesive as claimed in claim 1, characterized in that components B and C together make up at least 30% by weight, preferably at least 35% by weight and more preferably at least 45% by weight of the sum of components A+B+C.
- 15 11. A hotmelt adhesive as claimed in claim (1), characterized in that components A, B and C are selected so that the viscosity at 100°C is in the range from 5 to 15 Pas  $\pm$  15, more particularly  $\pm$  10%, as a function of the shear rate of 2 to 250 [sec<sup>-1</sup>].
- 20 12. A process for the production of the hotmelt adhesive claimed in (at least one of claims 1 to 11,) characterized in that the raw materials are mixed in an inert gas atmosphere and/or in a vacuum at temperatures of 150 to 200°C.
- 25 13. The use of the hotmelt adhesive claimed in (at least one of claims 1 to 11) for structural bonding in sanitary products, more especially for bonding diapers, panty liners and sanitary napkins.
14. The use of the hotmelt adhesive claimed in (at least one of claims 1 to 11) for bonding films, more particularly of polyolefins, and nonwovens, more particularly of polypropylene, the application temperature being
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between 120 and 180°C and preferably between 140 and 160°C, the coating weight being between 2 and 10 and preferably between 3 and 4 g/m<sup>2</sup> and the application rate preferably being between 50 and 400 m/min.

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